



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,633	03/12/2007	Halbe Tiemen Hageman	P18177-US1	8584
27045	7590	07/21/2009		
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024			EXAMINER SARWAR, BABAR	
			ART UNIT	PAPER NUMBER
			2617	
			MAIL DATE	DELIVERY MODE
			07/21/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/596,633	Applicant(s) HAGEMAN ET AL.	
	Examiner BABAR SARWAR	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed **05/04/2009** have been fully considered but they are not persuasive.
2. **Claims 1-8** were cancelled as per **preliminary amendments**.
3. **Claim 9** has been amended.
4. **Claims 9-26** are currently pending.
5. Applicant argued about features wherein an amount of traffic handling units of the plurality of traffic handling units as well as an amount of power supply units of the plurality of power supply units is activated in accordance with a power budget.

Greenwood discloses an apparatus for managing power supply to telecommunication base station. A wireless telecommunication system comprising a plurality of transceivers, a plurality of power supply units, and a power distribution unit (PDU) to manage power according to the power budget. The power distribution unit (**the control means which controls the supply power to the traffic handling units**) connected to the output of the power supply units, upon reduction in voltage from the power supply units, to disconnect the transceivers (**the traffic handling units**) in a progressive manner in accordance with predetermined power-shading priority rating. The power distribution unit monitors (**therefore controls**) the input voltage from the power supply units. If the input voltage falls below predefined threshold, the power distribution unit isolates one transceiver of the pair of transceivers serving each sector. If there is a primary failure, and a BTS is running on standby batteries, the PDU will

Art Unit: 2617

disconnect low priority equipment to conserve battery power. Therefore Greenwood shows the limitation “an amount of traffic handling units of the plurality of traffic handling units as well as an amount of power supply units of the plurality of power supply units is activated in accordance with a power budget.”

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 9, 11-15, 17-21, 23-26 rejected under 35 U.S.C. 102(b) as being anticipated by Martin W. Greenwood (GB 2281458 A), hereinafter referenced as Martin.

Consider **claim 9**, Martin discloses a telecommunication apparatus (**Page 1:1-4, Fig. 1, where Martin discloses an apparatus for managing power supply to a base station**) having a plurality of traffic handling units (**Fig. 1 element 26, where Martin discloses a plurality of transceivers, therefore traffic handling units**), and a plurality of power supply unit (**Fig. 1 element 12, where Martin discloses a plurality of power supply unit**) for powering the plurality of traffic handling units, comprising: a control means (**Fig. 1 element 18, where Martin discloses a power distribution unit, therefore the control means**) adapted to determine a power budget based on a power criterion (**Abstract, where Martin discloses the control means disconnecting the transceivers based on reduction in voltage, therefore determining a power budget**

Art Unit: 2617

based on a power criterion); and the control means operable to activate an amount of traffic handling units of the plurality of traffic handling units having a total power consumption equal to or less than the power budget (**Abstract, Page 2 lines 6-20, where Martin discloses supplying power to the transceivers based on priority rating of the transceivers**); and the control means operable to activate an amount of power supply units of the plurality of power supply units matching the total power consumption of the amount of activated traffic handling units (**Abstract, Page 3:11-13, Fig. 1, where Martin discloses that the power distribution unit is monitoring the power supply units**).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin in view of Hagstrom (US 5410740), hereinafter referenced as Hag.

Consider **claim 10**, Martin discloses everything claimed as implemented above (see claim 9). However, Martin does not explicitly disclose that the control means are adapted to transfer active traffic from a traffic handling unit which is to be de-activated, to one or more of the activated traffic handling units, before de-activating the to be de-activated traffic handling unit. Hag discloses that the control means are adapted to transfer active traffic from a traffic handling unit which is to be de-activated, to one or

Art Unit: 2617

more of the activated traffic handling units, before de-activating the to be de-activated traffic handling unit (**Col. 4:8-36, Fig. 1, where Hag discloses that the transceivers, with call in progress, are allowed to receive and transmit during power outage and transmissions being handled by other non-effected base stations**).

Therefore it would have been obvious to one of ordinary skills in the art at the time the invention was made to modify Martin with teachings of Hag so as to conserve power and continue functioning during a power failure as discussed in **Col. 1:44-47**.

Consider **claim 11**, Martin discloses everything claimed as implemented above (see claim 9). In addition, Martin discloses that a maximum power output of a subgroup of the plurality of power supply units matches a maximum power consumption of a subgroup of the plurality of traffic handling units (**Page 1:13-21, where Martin discloses The PDU managing power supply**).

Consider **claim 12**, Martin discloses everything claimed as implemented above (see claim 9). In addition, Martin discloses that the control means further comprises: a power status monitor for determining the power budget based on the power criterion (**Fig. 1 element 18**); a regulator for generating a regulator signal from an amount of active traffic (**Fig. 1 element 14, where Martin discloses a regulator**); and a decider for deciding on an activation of one or more of the plurality of power supply units based on the power budget as determined by the power status monitor, the regulator signal and an actual power consumption (**Page 3:11-13, Fig. 1, where Martin discloses that the power distribution unit is monitoring the power supply units, therefore a decider**).

Consider **claim 13**, Martin discloses everything claimed as implemented above (see claim 12). In addition, Martin discloses that the decider comprises a decision mechanism for taking account of the power budget as a limit value, the regulator signal as a desired value, and the actual used power as a factual value, the decision mechanism being adapted for activating as many power supply units and traffic handling units as required to match the regulator signal, the decision mechanism however being adapted to activate no more power supply units and traffic handling units than allowed by the power budget (**Page 3:6-19, Fig. 1, where Martin discloses that the power distribution unit is monitoring the power supply units**).

Consider **claim 14**, Martin discloses everything claimed as implemented above (see claim 9). In addition, Martin teaches that the control means further comprises: a stay alive mechanism operable, when the power budget is under a first, predetermined level, to only activate power supplies and traffic handling units to process emergency calls; the stay alive mechanism operable, when the power budget is under a second, predetermined level which is lower than the first level, to not activate any of the traffic handling units and only keep the control means and further monitoring hardware active, and the stay alive mechanism operable, when the power budget is under a third, predetermined level which is lower than the second level, to shut down the telecommunication apparatus (**Page 3:6-19, Fig. 1, where Martin discloses that the power distribution unit is monitoring the power supply units, and implementing priority ratings accordingly**).

Consider **claim 15**, Martin discloses everything claimed as implemented above (see claim 9). In addition, Martin discloses that the power criterion comprises at least one selected from the group consisting of: an amount of solar cell generated power, a charging condition of a battery for supplying power to the apparatus, a value of a main voltage supplied to the apparatus, an amount of fuel in a fuel tank of a generator for generating power for feeding the apparatus, and a failure of a power supply unit **(Abstract, Figs. 1, where Martin discloses failure of primary power source)**.

Claim 16, as analyzed with respect to imitations discussed in claim 10.

Claim 17, as analyzed with respect to imitations discussed in claim 11.

Claim 18, as analyzed with respect to imitations discussed in claim 12.

Claim 19, as analyzed with respect to imitations discussed in claim 13.

Claim 20, as analyzed with respect to imitations discussed in claim 14.

Claim 21, as analyzed with respect to imitations discussed in claim 15.

Claim 22, as analyzed with respect to imitations discussed in claim 10.

Claim 23, as analyzed with respect to imitations discussed in claim 11.

Claim 24, as analyzed with respect to imitations discussed in claim 12.

Claim 25, as analyzed with respect to imitations discussed in claim 13.

Claim 26, as analyzed with respect to imitations discussed in claim 14.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2617

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BABAR SARWAR whose telephone number is (571)270-5584. The examiner can normally be reached on MONDAY TO FRIDAY 09:00 A.M -05:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NICK CORSARO can be reached on (571)272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BS/

/BABAR SARWAR/
Examiner, Art Unit 2617

/NICK CORSARO/
Supervisory Patent Examiner, Art Unit 2617